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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/754,394	01/09/2004	Michael Frank Walsh	WMFR-P01-001	9186
7590 03/22/2007 MICHAEL FRANK WALSH 10414 WOODBURY WOODS CT. FAIRFAX, VA 22032			EXAMINER GARCIA, ERNESTO	
			ART UNIT	PAPER NUMBER
			3679	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/22/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/754,394

Applicant(s)

WALSH, MICHAEL FRANK

Examiner

Ernesto Garcia

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 January 2007 and 09 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 and 5-11 is/are pending in the application.
- 4a) Of the above claim(s) 3 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7 is/are allowed.
- 6) ☒ Claim(s) 1,2,5,6 and 8-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 January 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 26, 2007 and February 20, 2007 has been entered.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Election of Species***

Claim 3 is withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on December 13, 2004.

### ***Drawings***

The drawings were received on January 26, 2007. These drawings are acceptable.

### ***Claim Objections***

Claims 1, 2, 6, 7, 9, and 11 are objected to because of the following informalities:

regarding claim 1, "a trigger" in line 9 should be --the trigger-- recited in line 5, "a release pin" in line 9 should be --the release pin-- recited in line 4, and --the-- needs to be inserted before "one" in line 10 as these are the same one or more ball bearings or slugs recited in line 7;

regarding claim 2, line 2, "least one ball bearing" should be --one or more ball bearings--;

regarding claim 6, "a trigger" in line 11 should be --the trigger-- recited in line 7, "a release pin" in line 12 should be --the release pin-- recited in line 3, and --the-- needs to be inserted before "one" in line 12 as these are the same one or more ball bearings or slugs recited in line 9;

regarding claims 7 and 9, "a trigger" in line 9 should be --the trigger-- recited in line 5, "a release pin" in lines 9-10 should be --the release pin-- recited in line 4, and --the-- needs to be inserted before "one" in line 11 as these are the same one or more ball bearings or slugs recited in line 7;

regarding claim 11, "a trigger" in line 9 should be --the trigger-- recited in line 5, "a release pin" in line 10 should be --the release pin-- recited in line 4, and --the-- needs to be inserted before "one" in line 11 as these are the same one or more ball bearings or slugs recited in line 7; and,

Regarding claims 1-6, 7, 9, and 11, line 3, the comma before "to" should be deleted to link the function of eliminating ordinal locking of the trap to the internal spring. Appropriate correction is required. For purposes of examining the instant invention, the examiner has assumed these corrections have been made.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 10, the recitation "the load force distributed to the main structure and to the trap" makes unclear how the force C, as shown in Figure 3, is distributed between the main structure and to the trap without ever reciting the trap spring since the trap spring is what provides the force C that is distributed to the main structure and to the trap.

***Claim Rejections - 35 USC § 102***

Claims 1, 2, 5, 6, 10, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by De Pew, 3,065,011.

Regarding claim 1, De Pew discloses, in Figure 1, a low-force release mechanism comprising a main structure **10**, a trap **11**, an internal spring pin **12** with an internal spring **46**, a release pin **20**, a least one trigger **38**, one or more ball bearings **21**, and attachments **A15** by which a container **A8** (see marked-up attachment provided in the last Office action) is attached to the main structure **10** and the trap **11**. The release pin **20** is configured to be moveable to effect a position of the one or more ball bearings **21** in an internal geometry of the trap **11**. A load force (the spring **31** applies this load force) is distributed away from the trigger **38**. The one or more ball bearings **21** interact with a geometry of the trap **11**. The position of the trap **11** is locked and held. The one or more ball bearings **21** retract upon removal of the release pin such that the application of a low force on the trigger causes the internal spring pin **12** and the release pin **20** to move a position of the container (i.e., a released position).

Regarding claim 2, the release pin **20** and the one or more ball bearings **21** lock and hold the position of the trap **11**.

Regarding claim 5, the mechanism further comprises a hanger **13**.

Regarding claim 6, De Pew discloses, in Figure 3, a low-force release mechanism comprising a main structure **55**, a trap **51**, an internal spring pin **41**, an internal spring **46**, a release pin **20**, a least one trigger **53**, one or more ball bearings **21**, a moveable hanger **61**, and attachments **A15** (see marked-up attachment provided in the last Office action) by which a container **A8** is attached to the main structure **55** and the trap **51**. The release pin **64** is configured to be moveable. A load force is distributed away from the trigger **53**. The one or more ball bearings **21** interact with a geometry of the trap **51**. The position of the trap **51** is locked and held. Note that force can be applied to move the internal spring pin or receive force applied by the main structure as a point of external attachment.

Regarding claim 10, the load force is distributed to the main structure **10** and the trap **11** (note that the force is provided by the cargo and thus in a locked state, all the locked components will get a distributed equal force relative to the pull of the cargo).

Regarding claim 11, De Pew discloses, in Figure 1, a low-force release mechanism comprising a main structure **10**, a trap **11**, an internal spring pin **12** with an internal spring **46**, a release pin **20**, a least one trigger **38**, a trap spring **30**, one or more ball bearings **21**, and attachments **A15** by which a container **A8** (see marked-up attachment provided in the last Office action) is attached to the main structure **10** and

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the trap **11**. The release pin **20** is configured to be moveable to effect a position of the one or more ball bearings **21** in an internal geometry of the trap **11**. A load force (the spring **31** applies this load force) is distributed away from the trigger **38**. The one or more ball bearings **21** interact with a geometry of the trap **11**. The position of the trap **11** is locked and held. The one or more ball bearings **21** retract upon removal of the release pin such that the application of a low force on the trigger causes the internal spring pin **12** and the release pin **20** to move a position of the container (i.e., a released position).

***Claim Rejections - 35 USC § 103***

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over De Pew, 3,065,011, in view of Linder.

Regarding claim 8, De Pew, as discussed, fails to disclose the container is selected from a group consisting a bag, a box, a collapsible box, and a net. De Pew, however, suggests the term "cargo" in the title which implies boxes or anything that is able to contain a cargo. It is well known to put a cargo in a box such as weapons or food aid placed in a box as also taught by Linder. Therefore, as taught by Linder, it would have been obvious to one of ordinary skill in the art at the time the invention was made to select the container to be a box to deliver weapons or food aid to those in need.



Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over De Pew, 3,065,011, in view of Huff, 1,027,481.

Regarding claim 9, De Pew discloses, in Figure 1, a low-force release mechanism comprising a main structure **10**, a trap **11**, an internal spring pin **12** with an internal spring **46**, a release pin **20**, a least one trigger **38**, one or more ball bearings **21**, and attachments **A15** by which a container **A8** (see marked-up attachment provided in the last Office action) is attached to the main structure **10** and the trap **11**. The release pin **20** is configured to be moveable to effect a position of the one or more ball bearings **21** in an internal geometry of the trap **11**. A load force (the spring **31** applies this load force) is distributed away from the trigger **38**. The one or more ball bearings **21** interact with a geometry of the trap **11**. The position of the trap **11** is locked and held. The one or more ball bearings **21** retract upon removal of the release pin such that the application of a low force on the trigger causes the internal spring pin **12** and the release pin **20** to move a position of the container (i.e., a released position).

However, De Pew fails to disclose a string attached to the trigger **38**. Instead, De Pew teaches a wire attached to the trigger **38**. Huffe, however, teaches, in Figure 2, a string attached to a trigger D8 to release a low force mechanism. Therefore, as taught by Huff, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to replace the wire with a string to move the trigger thus releasing the low-force mechanism.

***Response to Arguments***

Applicant's arguments filed January 26, 2007 have been fully considered but they are not persuasive.

With respect to claims 1, 6, and 11, note the different interpretation of De Pew, 3,065,011.

Applicant argues that the ball bearings in De Pew do not interact with the internal geometry of the trap. Applicant argues that the ball bearings of De Pew protrude from the trap. In response, it should be noted that the balls are located internal of the holes in the trap and thus the balls interact with an internal geometry of the trap, which is the hole in the trap in its broadest reasonable interpretation. With respect to ball protruding from the trap, it should be noted that the ball does not protrude entirely out of the trap otherwise the balls will fallout.

Applicant further argues that the load applied by bracket 16 is greater than the force exerted by the internal spring thus the load is not distributed away from the trigger. It should be noted that the claims do not recite a comparison force relative to a force exerted by the internal spring.

***Allowable Subject Matter***

Claim 7 is allowed.

The following is a statement of reasons for the indication of allowable subject matter:

regarding claim 7, the prior art of record does not disclose or suggest a low-force release mechanism comprising a lift spring that can move an internal spring pin (line 10) with an internal spring (line 3). The closest prior art, De Pew, 3,065,011, discloses an internal spring pin 12 with an internal spring 46; however, there's no need to provide a lift spring to move the internal spring pin 12 since the internal spring 46 moves the internal spring pin 12 and thus a lift spring is not required.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernesto Garcia whose telephone number is 571-272-7083. The examiner can normally be reached from 9:30-6:00. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached at 571-272-7087.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*E.G.*

*Daniel P Stodola*

E.G.

March 19, 2007

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